PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT	:	COPPOLA, Vito A.
SERIAL NO	:	09/824,321
FILED	:	April 2, 2001
TITLE	:	METHOD OF SUPPRESSING THE OXIDATION CHARACTERISTICS OF NICKEL
Grp./A.U.	:	1742
Examiner	:	IP, Sikyin
Conf. No.	:	1241
Docket No.	:	P04988US01

DECLARATION OF VITO A. COPPOLA TRAVERSING REJECTIONS OR OBJECTIONS FILED UNDER 37 C.F.R. § 1.132

COMMISSIONER FOR PATENTS
Mail Stop Amendment
P. O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

I, Vito A. Coppola, hereby declare the following:

1. I am the sole inventor named on the above-identified application for U.S. Letters Patent.

2. I consider myself to be at least of ordinary skill in the technical art pertaining to my invention.

3. I have reviewed the Office Action dated August 13, 2004.

4. I have also reviewed UK Patent Application GB 2242203 cited by the Patent Examiner in the above-identified Office Action.

5. GB 2242203 relates to an alloy of platinum with another element, the other element may be nickel.

6. The claims of the present application provide for an alloy comprised of Ni and Pt that is resistant to oxidation in air up to 1200°C.

7. GB 2242203 does not explicitly disclose that its composition of Ni and Pt is resistant to oxidation in air up to 1200°C.

8. The oxidation resistance property as claimed in the present application is not necessarily present in the compositions disclosed in GB 2242203.

9. In order to achieve the oxidation resistance of the present invention, it is believed that instead of forming a homogenous alloy, the Pt forms an "eggshell" structure around the Ni particles, the "shell" composed of a Pt rich alloy and the interior of the egg composed of a Ni rich alloy. It is believed that this structure allows Ni to be protected against oxidation with a minimum quantity of Pt.

10. This eggshell structure of the present invention is formed in part due to the presence of a nickel powder with the Pt resinate.

11. GB 2242203 forms the Pt/Ni alloy from resinates, that is, solutions containing Pt and Ni ions. As the Pt and Ni are already intimately mixed before the mixture is heated, one would expect the Ni resinate/Pt resinate mixture to produce a more homogenous alloy than in the present invention.

12. A homogenous alloy with 10% or less Pt would not be expected to produce the oxidation resistance of the present invention.

13. Difference in reactants (nickel powder versus nickel resinate) and in the steps performed in the present invention result in a different structure than a homogenous alloy.

14. The GB 2242203 does not disclose a process that would necessarily lead to a product with the lack of homogeneity of the claimed invention as GB 2242203 does not use a nickel powder or an identical process.

I hereby declare that all statements made herein of my own knowledge are true, and that all statements made on the information and belief are believed to be true; and further that these statements were made with the knowledge that the willful false statements and the like so made are punishable by fine or imprisonment, or both, under § 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application, any patent issuing thereon, or any patent to which this verified statement is directed.

Dated this 10 day of December, 2004.

Vito A. Coppola

VITO A. COPPOLA